



CALIFORNIA
ENERGY
COMMISSION

RENEWABLE ENERGY PROGRAM

QUARTERLY REPORT TO THE
LEGISLATURE

July 2002 through September 2002

COMMITTEE REPORT

OCTOBER 2002
P500-00-007v11



Gray Davis, Governor

CALIFORNIA ENERGY COMMISSION1516 NINTH STREET
SACRAMENTO, CA 95814-5512

October 15, 2002

Members of the Senate Energy, Utilities and Communications Committee
Members of the Senate Budget and Fiscal Review Committee
Members of the Senate Appropriations Committee
Members of the Assembly Utilities and Commerce Committee
Members of the Assembly Budget Committee
Members of the Assembly Appropriations Committee
California State Capitol Building
Sacramento, California 95814

**RE: California Energy Commission's *Quarterly Report to the Legislature* Concerning the
Renewable Energy Program**

Honorable Members:

The Public Utilities Code (PUC), Article 5, Section 445(g) requires the California Energy Commission to submit quarterly reports on the Renewable Energy Program. Enclosed is the eighteenth *Quarterly Report to the Legislature* for the Program, covering the period July 1 through September 30, 2002. As reflected in this report, the Energy Commission continues to make excellent progress in implementing the initial Program, and in making plans to transition to the extended program in the first quarter of year 2003.

Should you have any questions or comments concerning these reports, please contact Tim Schmelzer, Assistant Director of the Office of Governmental Affairs, at 654-4942 or by e-mail at [tschmelz@energy.state.ca.us].

Respectfully submitted,

JOHN L. GEESMAN
Commissioner and Presiding Member
Renewables Committee

JAMES D. BOYD
Commissioner and Associate Member
Renewables Committee

Enclosure

cc: California Legislative Analyst's Office

California Energy Commission's Quarterly Report Regarding the Renewable Energy Program (July 1 - September 30, 2002)

The Energy Commission is pleased to submit its *Quarterly Report to the Legislature* on the Renewable Energy Program, covering the period July 1 through September 30, 2002. The Energy Commission is required to report to the Legislature quarterly on fiscal and functional aspects of the program.¹ This report describes the Energy Commission's implementation activities, including information regarding awards submitted to the State Controller for payment,² the cumulative commitment of claims by account, the relative demand for funds by account, a forecast of future awards, and related matters.

Several key pieces of legislation were signed into law this quarter that will affect the Renewable Energy Program. We will report program implementation activities under the new legislation in the first *Quarterly Report to the Legislature* in year 2003, at which time the Energy Commission is authorized to implement the program as directed by new legislation.

This report documents the fund expenditures for the initial Renewable Energy Program implementation, focusing on the program activities in the third quarter of year 2002. Following background concerning the Renewable Energy Program and its enabling legislation, this report discusses the program's implementation and summarizes its expenditures to date. Table I highlights the program activities for this reporting period, and lists the activities expected for the upcoming quarter. Table II shows the Renewable Energy Program's cumulative funding and expenditures, including disbursements from this reporting period. The remainder of the report provides the details of the program activities for this quarter and summarizes the program's progress thus far.

Background

Assembly Bill 1890 (AB 90, Sher, Chapter 854, Statutes of 1996) required California's three major investor-owned utilities to collect \$540 million from their ratepayers over a four-year period (1998 to 2002) to help support renewable electricity-generation technologies and develop a renewable market. As mandated by AB 1890, the Energy Commission submitted its *Policy Report on AB 1890 Renewables Funding (Policy Report)* to the Legislature in March 1997, with recommendations for allocating and distributing these funds. Senate Bill 90 (SB 90, Sher, Chapter 905, Statutes of 1997) subsequently established the Renewable Resource Trust Fund, placed the \$540 million into the fund, and directed the Energy Commission to distribute the fund through four distinct accounts, which is consistent with the *Policy Report*. These accounts and the total funds initially allocated to each are as follows:

- Existing Renewable Resources Account (**\$243 million**)
- New Renewable Resources Account (**\$162 million**)
- Emerging Renewable Resources Account (**\$54 million**)
- Customer-Side Renewable Resources Purchases Account:
 - Customer Credit Subaccount (**\$75.6 million**)
 - Consumer Education Subaccount (**\$5.4 million**)

In January 1998, consistent with SB 90, the Energy Commission adopted overall funding guidelines, eligibility requirements, yearly allocations, and account-specific guidelines to assist participants in applying for funding from the various accounts within the Program. These **Guidebooks**, as amended in response to changing market conditions, provide for fund reallocations among accounts, which are discussed in this report.

In September 2000, codification of Assembly Bill 995 (AB 995, Wright, Chapter 1051, Statutes of 2000) and Senate Bill 1194 (SB 1194, Sher, Chapter 1050, Statutes of 2000) created the Reliable Electric Service Investments Act (RESIA) and extended the collection of funds from 2002 to 2012. The RESIA directs that, beginning January 2002, an amount starting at \$135 million per year is collected from the same ratepayers noted above. The RESIA required the Energy Commission to provide recommendations on how to allocate funds over the first five years of that period. The Energy Commission submitted its recommendations to the Legislature in June 2001 in a report titled, ***Investing in Renewable Electricity Generation in California³ (Investment Plan)***. The Legislature incorporated these recommendations into Senate Bill 1038 (SB 1038, Sher, Chapter 515, Statutes of 2002), which Governor Davis signed into law September 12, 2002. The Energy Commission is required to prepare a second investment plan by March 2006, proposing an allocation of RESIA funds for the period 2007 to 2012.

To the extent possible, we intend to transition seamlessly from implementing the initial Renewable Energy Program to the extended program under SB 1038. During this transition period, some initial program funds are being held in abeyance, while other funds continue to be disbursed from the Renewable Resource Trust Fund until the funds are expended, in accordance with each account's **Guidebook**. A smooth transition will minimize further interruptions in funding disbursements, provide the renewable energy industry and its customers with a measure of certainty, and maintain the momentum gained during the initial program implementation. Senate Bill 1038 directs that any funds remaining in the Renewable Resource Trust Fund at the end of the initial program will be rolled into the extended program.

The Energy Commission will also have a role in implementing a portion of Senate Bill 1078 (SB 1078, Sher, Chapter 516, Statutes of 2002), also signed by the Governor on September 12, 2002, which establishes a Renewables Portfolio Standard (RPS) in California. Senate Bill 1078 requires utilities to increase their procurement of renewable energy resources by at least one percent each year so that 20 percent of its retail sales are procured from eligible renewables by 2017. The Energy Commission will develop eligibility requirements for certifying renewable facilities, create a system for tracking renewables purchases and sales, verify utility procurement compliance, and cover the above-market cost for renewables purchases. The Energy Commission will collaborate with the California Public Utilities Commission (CPUC) and other agencies as it prepares for implementing the RPS under SB 1078.

During the upcoming quarter, we will conduct public workshops to discuss the procedures and guidelines necessary for the program's implementation under the new legislation. The considerations for workshop discussions will likely include lessons learned during the initial four years of the program, stakeholder input on pertinent issues, and program staff recommendations. The outcomes of the workshops and details concerning the structure and implementation plans for the program will be provided in the next quarterly report.

Renewable Energy Program Implementation

With the goal of maintaining the benefits and diversity that renewable energy offers, the initial Renewable Energy Program was created to move the industry towards market competitiveness by disbursing the funds to assist each market segment in unique ways, as discussed below:

- The **Existing Account** offers financial incentives to support existing renewable facilities through a tier system of varying incentive amounts based on the market competitiveness of the eligible renewable technologies.
- The **New Account** provides financial support to encourage new renewable electricity generation projects that are most likely to become competitive. Prospective new projects compete in auctions to receive a fixed production incentive.
- The **Emerging Account** grants capital cost buydowns (rebates) to assist customers who purchase renewable technologies for on-site generation. Reduced purchase costs encourage manufacturers and retailers to expand operations and reduce costs to consumers.
- The **Customer Credit Subaccount** incentives allow renewable providers to provide electricity products to their customers at prices that are competitive with conventional electricity. Funds are paid via “customer credits” to renewable providers and passed on to their eligible customers.
- The **Consumer Education Subaccount** increases public awareness of renewable energy options and the benefits of renewable energy, and encourages purchases of renewable energy and renewable technologies through information dissemination.

Table I highlights the key program implementation activities that occurred in each account during this reporting period, and lists the activities we expect will occur during the fourth quarter of 2003.

**Table I - Renewable Energy Program
Third Quarter 2002 Program Implementation**

Account, Program-Implementation, and Funding Activities: July – September 2002	Expected Funding and Implementation Activities: October - December 2002
Existing Account	
<ul style="list-style-type: none"> A total of 378 facilities are registered as renewable suppliers; 274 facilities are eligible for funding. No payments were made this quarter. Rollover funds total \$36.3 million for Tiers 1, 2, and 3 excluding the funds authorized for reallocation to the New Account for the third auction. 	<ul style="list-style-type: none"> No further Existing Account payments are expected to be made from the initial program funds. Under SB 1038, no further payments can be made until 2003. We anticipate that the first payments under the extended program will be made in the first quarter of 2003.
New Account	
<ul style="list-style-type: none"> Thirty-seven projects are currently on-line and producing energy. Two new projects totaling 43.1 MW capacity came on-line this quarter. Payments totaling over \$2.4 million were made this quarter. To date, payments totaling \$18.0 million have been made to 15 on-line facilities for approximately 1,500 GWh of new renewable energy generation. The Renewables Committee continues to review the proposed cancellation of four funding awards totaling \$18 million was appealed by the project developer through a Petition for Reconsideration. Guidelines were revised to give the Renewables Committee the discretion to reallocate cancelled funds to projects whose award was reduced due to lack of funds at the close of an auction. Four petitions for funding award extensions were approved by the Renewables Committee. 	<ul style="list-style-type: none"> Construction of new projects will continue, as will payments to on-line facilities. Funding Award Agreements with winning bidders in the second and third auctions will continue to be finalized. A final decision is expected on the Petition for Reconsideration of award cancellations. The staff will work with utilities and the CPUC to implement SB 1078 and SB 1038. The staff will hold public workshops for stakeholders to discuss new <i>Guidebook</i> rules. Seven petitions for funding award extensions are in the Committee review process; decisions are expected in early November. We expect to receive two additional petitions next quarter.
Emerging Account	
<ul style="list-style-type: none"> Funds encumbered for Buydown Program reservation requests currently total \$40.5 million. To date, payments for installed systems total \$50.4 million, with \$8.49 million in payments this quarter. This quarter 996 new reservation requests were received. Since funds totaling \$8 million were approved for rebates to publicly-owned utility customers, 48 applications have been submitted. \$13 million was re-allocated from the Existing Account to the Emerging Account to continue to offer rebates for the remainder of 2002. The Solar Schools Program was established, providing funds for up to 90 percent of the net cost of photovoltaic systems for eligible public schools. 	<ul style="list-style-type: none"> The Commission will continue to update lists of eligible PV modules and inverters. At the current rate of activity, Buydown rebate funds will be nearly depleted by the end of the fourth quarter. The Commission will be redesigning the Emerging Account to reflect changing market conditions, and to respond to AB 58, which calls for rebates of up to 75 percent of the cost of eligible technologies to be available for affordable housing projects.
Customer Side Account	
Customer Credit Subaccount	
<ul style="list-style-type: none"> Although only five marketers remain active in the market, 29 registered providers have registered a total of 48 products containing renewable energy. To date, \$58.9 million has been paid to providers.⁴ No payments were made to providers this quarter, as payments for market activity in 2002 could not be made until SB 1038 passed. 	<ul style="list-style-type: none"> Market activity is expected to remain fairly steady as most providers have already exited the market, and no new customers are allowed to participate in the direct access market. Payments will not be made for market activity in 2002 in the fourth quarter. Payments to providers may resume after guidelines reflecting SB 1038 legislation have been approved.

Table I - Renewable Energy Program (cont'd)

Account, Program-Implementation, and Funding Activities: July – September 2002	Expected Funding and Implementation Activities: October - December 2002
Customer Side Account	
Consumer Education Subaccount	
<ul style="list-style-type: none"> • ICF Consulting continued to implement the public awareness campaign. A new brochure for the Emerging Buydown rebate program and renewable energy fact sheets were developed and printed in September. • Steering Committee meetings for the Hearst Castle Visitor Center Renewable Energy Project continued during this quarter. • ICF Consulting finalized the Renewable Energy Alliance Resource Kit, for distribution to Alliance members. • Payments to ICF for this quarter totaled \$212,123. • The video, <i>This Renewable House</i>, continued to air on several public television stations in California. A free video rental is available through Wherehouse Music and Bradley Video stores and public libraries. • The American Wind Energy Association (AWEA) included copies of the <i>Small Wind Electric Systems: A Consumer Guide</i> in their follow-up mailing to targeted California communities in September. • Teacher training seminars were completed in Berkeley, San Francisco, and Oakland. Fifty Solar Power Monitors have been built and distributed to pilot schools. • The staff exhibited and conducted workshops at SolFest at the Real Goods Solar Living Center in Hopland in August. The staff also exhibited at the SoCal Renewable Energy Expo at the Pomona Fairplex in Los Angeles. • Three "streaming" video segments on photovoltaics were posted on the www.consumerenergycenter.org website. Video footage about wind energy was shot and is being edited. • The staff attended the 8th International Symposium on Renewable Energy Education on August 4-8 in Florida. • Applications were due July 5, 2002 in response to the third Program Opportunity Notice. Eight grant projects were awarded funding at the August 28, 2002 Business Meeting. Grant agreement packages are being developed. • The California Solar Center is being sponsored for one year. 	<ul style="list-style-type: none"> • Work will continue on the five grant projects from the second grant solicitation. • The eight new grant projects are expected to start next quarter. • ICF Consulting will continue public relations and public awareness campaign activities. • The staff will present program activities and kick off the Renewable Energy Alliance at the October Solar Forum meetings in Los Angeles, San Diego and Sacramento. • The staff is will participate at the following events in October and November: Annual Green Materials Showcase in San Francisco; Long Beach Home & Garden Show; Growing Greener School Grounds in San Francisco; Nature By Design in San Francisco; Building Industry Show in Long Beach; UPEX '02 and US Green Building Council International Conference & Expo in Texas; and Buildex in San Francisco. • The staff will distribute marketing materials to Solar Home Tour participants statewide in October. • The staff will provide Solar School Program flyers to public schools in California. • A PV System Operation and Maintenance Guide will be developed for distribution to Buydown applicants and interested parties. • <i>Buying a Solar PV System: A Consumer Guide</i> will be updated and distributed.

Renewable Resources Trust Fund Expenditures

From January 1998 through September 30, 2002, the Renewable Resource Trust Fund had collected a total of \$555.0 million for all of the accounts for the initial program implementation. As of the third quarter of 2002, the Energy Commission had awarded a total of \$282.3 million, reflecting account payments (disbursements). Eligible applicants had reserved a total of \$243.7 million, reflecting fund reservations (encumbrances).

The Energy Commission encumbered funds from the Emerging Account for systems eligible for the Buydown Program rebates, the Consumer Education Subaccount for grant and contract project activities, and from the New Account for 73 projects with funding award agreements from the first, second, and third auctions. Funding for these New Account projects could eventually total up to \$236.1 million. Table II provides a financial summary of the Renewable Resource Trust Fund as of the third

quarter of 2002, reflecting cumulative fund expenditures and encumbrances since the beginning of the Program, including those that occurred during this reporting period.

Table II - Renewable Resource Trust Fund
Cumulative Funding and Expenditures as of September 30, 2002
(\$ Millions)

	Existing Account	New Account	Emerging Account	Customer Credit	Consumer Education	Total
Collected Funds	243.000	162.000	69.000 ⁵	75.600	5.400	555.014 ⁶
Total Disbursements	(151.744)	(18.025)	(50.371)	(58.861)	(3.277)	(282.278)
3rd Quarter '02 Disbursements	(0.0)	(2.474)	(8.495)	(0.0)	(0.452)	(9.421)
Intrafund Transfers	0.000	0.000	0.000	0.000	0.000	0.000
Intrafund Reallocations	(68.000) ^{7,8,9}	33.800 ^{10,11}	44.200 ¹²	(10.000) ¹³	0.000	0.000
Balance	23.256	177.775	62.829	6.739	2.123	272.722
Encumbrances	(23.256) ¹⁴	(177.775) ¹⁵	(40.497) ¹⁶	0.000	(2.123) ¹⁷	(243.651)
Unencumbered Funds	0.00	0.00	22.332	6.739	0.00	29.071

The participating utilities fulfilled their requirements under SB 90 to collect the \$540 million in funds for the initial program. Pending a California Public Utilities Commission (CPUC) ruling, Pacific Gas and Electric and San Diego Gas and Electric continue to make deposits into the Renewable Resource Trust Fund for the extended program under SB 1038, based on the amounts required under SB 90. Southern California Edison has decided not to make deposits until after the CPUC makes its ruling. The utilities have paid \$45 million to date for the extended program. Combining these funds with those transferred from the General Fund as authorized by Assembly Bill 29X (AB 29X, Kehoe, Chapter 8, Statutes of 2001-02 First Extraordinary Session), and with voluntary contributions, brings the total funds collected to date to over \$600 million. We will begin reporting on SB 1038 program funds and account activities during the first quarter of year 2003, at which time the extended program will be implemented.

The noteworthy activities that occurred in each account during this reporting period are discussed in the next sections of this report.

Existing Account

As of December 31, 2001, the Energy Commission suspended payments to all Existing Account facilities, since the legislation authorizing the extension of the Renewable Energy Program had not been approved by that date. As a result, no disbursements were made during the third quarter of 2002 to Existing Account facilities, and no further payments will be made in 2002. The Governor signed SB 1038 in September 2002, and we estimate that the first payments from the Existing Account will not be made until January or February of 2003.

Disbursements from the Existing Account to date total \$151.7 million. The Existing Account's rollover amount currently stands at \$36.3 million,¹⁸ which remains after the reallocation of \$68 million to the New Account and Emerging Account (\$40 million and \$28 million respectively). The rollover consists of the funds remaining in the Existing Account after payments have been made to facilities in a given monthly payment cycle. Any funds that are not paid in one month are rolled over and added to the following month's allocation, becoming available for that month's payments. The Energy Commission has approved up to the full amount of the Existing Account's rollover funds remaining from the initial program implementation for reallocation to a separate area of the Renewable Energy Program. After determining the amount of funds needed for reallocation, any remaining funds shall be available for rollover into funds for the extended program under SB 1038.

To date, the Energy Commission has reallocated or authorized the reallocation of up to \$80 million in Existing Account rollover funds to the New Account to fund the winning projects from the second and third New Account auctions. In the first quarter of 2000, \$40 million was reallocated to the New Account for a second auction, and in the second quarter of 2001, up to a maximum of \$40 million was authorized for reallocation for a third New Account auction. The actual transfer of funds for the third auction will not occur until the winning projects are on-line and eligible to receive payments.

To satisfy the requirements of AB 29X, an additional \$15 million in Existing Account rollover funds was reallocated to the Emerging Account to provide increased funding for Emerging Renewables Buydown rebates. The Energy Commission reallocated an additional \$6.2 million from the Existing Account to the Emerging Account. These funds were originally reallocated to the New Account for the second auction; because it was not needed for that purpose, that amount was redirected to the Emerging Account.

In September 2002, the Energy Commission reallocated \$13 million from the Existing Account to the Emerging Account to ensure sufficient funding for Buydown rebates through the end of 2002. These were funds previously approved for reallocation to the New Account to fund the third auction, but will not be needed for that purpose. At a later date, the Energy Commission will determine the actual amount of funding needed to fully fund winning projects from the third New Account auction. This figure may not be known for some time because auction winners could drop out, qualify for additional incentives, or have their funding awards either reduced or canceled.

New Account

During the third quarter of 2002, two landfill gas projects with combined capacity of 7.8 MW, and one wind project with a capacity of 3.0 MW, cancelled their funding awards with the Energy Commission. In addition, two landfill gas projects with a combined rated capacity of 1.6 MW cancelled their funding awards earlier this year; that development was inadvertently omitted from previous *Quarterly Reports*. Among the successful bidders throughout the three New Account auctions, 73 projects continue to hold funding awards, including 37 projects that are on-line and producing electricity. These projects currently contribute 244.15 MW of new renewable generating capacity to California's electricity supply.

To date, nine landfill gas facilities totaling 27.6 MW of capacity, two geothermal projects totaling 59 MW, two wind projects totaling 18.6 MW, one 7.5 MW biomass project, and one 9.9 MW small hydro project have received \$18.0 million in payments from the New Account. These projects received

\$2.5 million this quarter, and represent approximately 1,500 gigawatt-hours (GWh) of new renewable generation. The remaining 22 facilities, totaling 121.6 MW of capacity, are delivering power to the grid but have not yet received incentive payments for reasons like not submitting invoices, adequate proof of generation, or adequate proof of being on-line.

During the third quarter of 2002, two New Account projects holding awards from the first auction added 43.1 MW of new renewables capacity to the grid. The City and County of San Francisco's 2.1 MW Southeast Digester Gas Cogeneration plant came on-line on July 25, and Cabazon Wind Partners' facility brought 41 MW of wind capacity on-line on August 31, 2002.

The New Account program guidelines were revised during the second quarter of 2002 to establish a petition process for project developers requesting extension of their funding awards under an amendment to Public Utilities Code section 383.5(c)(2)(B). The amendment allows New Account projects to come on-line after December 31, 2001 and still receive five years of incentive payments from the program, as long as the Energy Commission makes a formal finding that the delay in on-line date was a result of "circumstances beyond the developer's control."

Fifteen project developers with funding awards from the first auction and eleven project developers from the second auction experienced delays and were unable to begin generating electricity by the December 31, 2001 deadline. Twenty-two project developers have submitted petitions asking for award extensions, citing reasons such as permitting delays, the lack of available power purchase contracts in California's uncertain electricity market, and the inability to get project financing without such contracts. During the third quarter 2002, the Commission continued to evaluate these petitions.

Under the program guidelines, the policy committee overseeing the Renewable Energy Program has 30 days from receiving a petition to either issue a decision or schedule a public hearing to consider the petition. The full Energy Commission must approve the policy committee's decision on the petition at a regularly scheduled Business Meeting. To date, the Energy Commission has extended the awards for thirteen projects. The remaining petitions will be evaluated during the fourth quarter of 2002.

Three wind projects from the first auction owned by Enron Wind Development Corporation and one wind project owned by Painted Hills Wind Developers (an Enron affiliate) are facing cancellation of their funding awards because the project developers:

1. did not submit information required by the program guidelines regarding progress toward bringing the projects on-line, and
2. did not maintain appropriate contact with the Energy Commission regarding the projects.

The funding awards for these four wind projects (113 MW) total \$17.8 million. Letters were sent to the project developers in March 2002 informing them of the Energy Commission's intention to cancel their funding awards. The project developers jointly submitted a Petition for Reconsideration to the Energy Commission. The petition was deemed incomplete, however, and a letter was sent to the developers informing them of the revisions necessary to make the petition complete. The Energy Commission will make a decision on the Petition for Reconsideration in the fourth quarter of 2002. Any funds freed by award cancellations are returned to the Renewable Resource Trust Fund for reallocation.

The New Account **Guidebook** was amended during the third quarter of 2002 to give the Renewables Committee the discretion to reallocate funds from cancelled projects to other projects whose award was reduced due to lack of available funds at the close of an auction. At this time, no additional funds have been awarded to a project whose award had previously been reduced.

Emerging Account

The Emerging Account's Buydown rebates continue to be appealing, primarily as a result of California residents' and businesses' interest in securing a reliable and cost-predictable electricity source, with environmental benefits also being a strong motivator, according to surveys and discussions with consumers. Payments totaling \$8.50 million were made to participants in the Emerging Account during the third quarter of 2002, bringing total disbursements from the Emerging Account to \$50.4 million.

Another stimulus for consumers considering a solar or wind system is a new state tax credit. Signed by Governor Davis in September 2001, Senate Bill 17X2¹⁹ (SB 17X2, Brulte, Peace, et al., Chapter 12, Statutes of 2001-02 Second Extraordinary Session) was designed to encourage the installation of solar and wind systems up to 200 kilowatts (kW) by providing a 15 percent tax credit for tax years 2001 and 2002 and a 7.5 percent credit for tax years 2003 and 2004. The Energy Commission worked with the Franchise Tax Board to develop worksheets for self-certifying systems in applying for the tax credit.

The Emerging Renewables Buydown Program has received 7,405 reservation requests since it began in March 1998, including 996 new requests received during the third quarter of 2002. All rebate funds available were encumbered in the third quarter 2002, necessitating a reallocation of \$13 million in funds from the Existing Account to the Emerging Account in September to continue reserving and processing rebates for the remainder of the year. Assuming that account activity continues at this brisk and steady pace, these funds are likely to be depleted near the end of 2002.

Funding for rebates for medium and large systems has been fully encumbered since the fourth quarter of 2001. The California Public Utility's Self-Generation Program limits buydown rebates to systems ranging in size from 30 kW to 1 MW. This limit caused a "funding gap" for medium-sized systems between 10 to 30 kW. The \$13 million reallocation discussed above closed that gap by allocating \$3 million for systems 10 to 30 kW in size, with the remaining \$10M for small systems up to 10 kW.

Assembly Bill 29X ordered the transfer of \$8 million from another Renewable Energy Program account (Existing Account) to the Emerging Account for rebates to customers of local publicly-owned electric utilities, available since December 2001. Only 48 reservation requests have been submitted for these funds, resulting in reserved rebates totaling \$495,453. Several factors could explain this low rate of activity. Customers of publicly-owned utilities generally do not have the same economic incentive to offset their electricity costs, or some publicly-owned utilities offer similar rebates. In addition, system retailers could have enough business without needing to advertise rebates in publicly-owned utility areas. Last, publicly-owned utilities may not be promoting the rebates to their customers.

During the third quarter, the Energy Commission approved several changes to the Emerging Account **Guidebook**. One revision simplified the application process for new home developments, a growing market for PV installations. The Energy Commission continues to make changes to the **Guidebook** to clarify program requirements and streamline the buydown reservation and payment processes.

The Energy Commission approved eligibility requirements for the new Solar Schools Program at its September 25 Business Meeting. This program was made possible through an interagency agreement with the California Power Authority and \$1.25 million in funding from the Attorney General's Office. Eligible public schools, kindergarten through 12th grade, may receive funding for up to 90 percent of the net cost of PV electricity generating systems. Half of that funding is provided by the Emerging Account, with the remaining 40 percent provided in the interagency agreement. Eligible school districts are limited to 20 kW of generation per qualifying district, and funding per district is limited to \$153,000 on a total expenditure of \$170,000. The staff is working with the Energy Efficiency and Demand Analysis Division's Bright Schools program staff to disseminate a flyer promoting the Solar Schools Program, which was developed with the assistance of the Renewable Energy Consumer Education staff.

With the assistance of technical support contractors, the staff continues to update lists of eligible PV modules and inverters.

Customer Credit Subaccount

At the close of the third quarter in 2001, the CPUC implemented Senate Bill 1X (SB1X, Burton, Chapter 4, Statutes of 2001-02 First Extraordinary Session), which directed the CPUC to suspend retail customers' right to purchase energy through the direct access market. This suspension, which became effective on September 20, 2001, prohibits new customers from entering into direct access contracts; customers that were already making direct access purchases, however, may continue to do so.

For eligibility, the Customer Credit Subaccount requires participants to purchase renewable electricity through a direct access contract. While direct access remains suspended for new program participants, it continues to affect the implementation of the Customer Credit Subaccount in 2002.

A reflection of market activity is depicted through the number of providers registered and actively serving customers. The number of active providers has remained steady at five for the first three quarters of 2002.

Because providers are not required to change their registration status with the Energy Commission when they exit the market, the total number of registered renewable providers continues to remain fixed from last quarter at 29 providers with 48 products, although only five providers are active in the market. There are five registered wholesalers participating in the Customer Credit Subaccount.

Payments will not be made for 2002 market activity until guidelines reflecting SB 1038 requirements have been drafted and approved. Payments would only be made in the fourth quarter of 2002 if funds for large customers are returned, allowing for re-distribution to other large customers with outstanding claims. Large customers, defined as non-residential and non-commercial, met the \$15 million payment cap for that sector in the second quarter of 2001.

To date, the State Controller has paid \$58.9 million to registered renewable providers for customer credits. No payments were made in the third quarter of 2002; payments in the second quarter completed payment for activity occurring in 2001.

Consumer Education Subaccount

The Energy Commission released its third Program Opportunity Notice (PON) and received 52 applications in July for grant funding to advance the growth of the renewable energy market in California. Approximately \$500,000 was made available for projects in the following categories: schools, new construction, non-profit or public entities, advertising, and publicity or events. Eight new grant projects were awarded at the Energy Commission's Business Meeting on August 28, 2002. Grant agreements are being developed, and the new projects are expected to be underway by next quarter.

Recent activities under the second grant solicitation, offered in 2001, include the following:

- The 30-minute video, "This Renewable House," continued to air on California public television stations. Four PBS stations aired the program: CityTV 6 in Whittier, KEET in Eureka, KCSM in San Mateo, and KVIE Channel 6 in Sacramento. Copies of the video were distributed to public libraries and local video stores in California. Free rentals are available at 76 Wherehouse Music and nine Bradley Video stores. The video will be included in the Renewable Energy Alliance Kit for distribution to its members. The video was also promoted in the September/October issue of the Local Government Commission's newsletter, *Currents*.
- More lesson plans were developed and piloted to schools. Pilot schools were given Solar Power Monitor Kits. The Monitor integrates both volt and amp meters with several loads (lamp & fan) onto one easy-to-use easel. Small PV modules are included in a kit to show how the system works. Tips on how to conduct a fundraiser for school projects were compiled together with grant opportunities, and posted on the solarschoolhouse.org website. Teacher-training workshops were conducted in San Francisco, Berkeley, and Oakland.
- The American Wind Energy Association (AWEA) conducted a follow-up direct mail campaign in September 2002. The mailing included a flyer on "California Wind Power for Energy Independence," a post card providing a dealer-contact opportunity, and a copy of "Buying a Small Wind Electric System" consumer guide to 35,000 households situated on at least five acres in the counties of Solano, Kern, San Bernardino, Los Angeles, Alameda, Sonoma, Santa Cruz, and San Luis Obispo. More success stories of residential-scale wind turbine installations were posted on AWEA's website at www.awea.org/smallwind/success_stories.html. A press release announced the campaign.

The contractor developing and implementing the Renewable Energy Public Awareness Campaign, ICF Consulting, continues to develop campaign materials and conduct media outreach. New fact sheets for wind, PV, biomass, geothermal, fuel cells and renewable energy were finalized this quarter. Promotional products developed this quarter include a magnet and pens made from recycled materials. Payments to ICF Consulting for which invoices were received this quarter total \$212,123.

During the third quarter, ICF Consulting continued working with newspapers, trade publications, and radio stations to generate articles and interviews promoting renewable energy. Articles were submitted to *Home Energy*, *California Real Estate Journal* and *Business Facilities* for publication in October 2002. Articles were placed in *The Marina Times* and the *Victorville Daily Press*. The Energy Commission staff were interviewed by KNX-AM "Newsradio 1070" in Los Angeles. The two- to five-minute segment, aired on July 6th, provided information on installing residential PV systems.

ICF Consulting and the staff initiated a radio news project during this quarter with EarthNews Radio, a weekend radio feature picked up in California by KCBS, KNX, KPOO, KAZU, and KVON reaching audiences from southern California to Sacramento. The 90-second news features provide information to listeners about how to understand and evaluate new environmental technologies including renewable energy resources. Fifteen interview segments are being taped and will air during October, Energy Awareness Month, and November.

On August 17, 2002 the Renewable Energy Program exhibited at the Renewable Energy Expo in Los Angeles. The small audience was highly targeted and ideal for this outreach effort. The staff conducted four workshops throughout the day to educate attendees on the benefits of adopting renewable energy technologies and on the Emerging Buydown rebate program.

The Energy Commission sponsored and staff exhibited at Solfest, held on August 24 and 25, in Hopland. The attendance for this annual event, drawing approximately 7,000 visitors this year, has grown each successive year. The staff conducted two well-attended workshops on the Buydown Program and distributed materials to booth visitors. This audience is educated and motivated about environmental issues, sustainability and renewable energy.

The Energy Commission and ICF Consulting are working with representatives of the Hearst Castle® Visitor Center to develop a showcase project highlighting energy efficiency and renewable energy technologies. The goal of this project is to create a public showcase of the installation and use of renewable energy systems at the Visitor Center and to raise awareness about renewable energy. One steering committee meeting was conducted this quarter. A list of potential sponsors, grant sources and foundations were compiled, and the Hearst Castle® staff is conducting further research into potential renewable energy systems to be installed at the site.

The Renewable Energy Alliance, developed by ICF Consulting, has been quite successful at signing up new participants, with 69 enlisted to date. Alliance members will be provided with a Resource Kit to assist them in promoting renewable energy. The Kit includes renewable energy educational tools including videos, news stories, case studies, customizable fact sheets, and public service announcements.

The Energy Commission completed a series of short videos on solar photovoltaics shot in the Los Angeles/Palm Springs area. Various photovoltaic applications are profiled along with interviews of PV owners. Each of the three- to eight-minute videos is placed on the www.consumerenergycenter.org website. Video topics include the following:

- *"About Photovoltaics/An Overview of PV Technology"*
- *"Photovoltaic Installation Details"*
- *"Overview of the Emerging Buydown Program"*

With the assistance of the Energy Commission's technical support subcontractor, Endecon Engineering, the staff is developing a simple *PV Maintenance and Troubleshooting Guide* for consumers who have installed a PV system and need to understand how to care for and receive the highest performance from their systems. After being reviewed by PV industry experts, the staff received a draft of the *Guide* this

quarter and plans to finalize it next quarter for distribution to interested contractors, builders, and homeowners.

Summary

The Energy Commission continues to make excellent progress in implementing the initial Renewable Energy Program. The program responded to California's recent energy challenges by hastening the development of new renewables projects and continuing to develop consumer demand for renewable energy, despite the suspension of customers' ability to enter into direct access contracts with a renewable energy provider. Over the last two years, customer interest in rebates for emerging renewable technologies, especially for solar PV and wind energy systems, has increased tenfold.

During the last four years the Renewable Energy Program brought over 240 MW of new renewables online, which could eventually total 1,300 MW of new renewable capacity for California's electric grid. We helped 274 facilities keep 4,400 MW of existing renewables operative and supported over 200,000 customer purchases of electricity generated by renewable energy. By the end of this year, we will have provided rebates for installing 7,500 on-site systems representing over 21 MW of solar and wind energy capacity. The program continues to help consumers learn about the benefits of renewable energy and how they can support renewables in today's marketplace.

During the next quarter, we will solicit public input for developing implementation plans for the extended Renewable Energy Program under SB 1038 and SB 1078 and report on our progress in transitioning to the extended program.

Endnotes

¹ Public Utilities Code (PUC), Article 5, Section 445(g)

² As a procedural matter, the Energy Commission submits awards directly to the State Controller for payment, rather than through the Treasurer.

³ California Energy Commission Publication Number P500-00-022, June 2001

⁴ The expenditure to date from the Customer Credit Subaccount remains unchanged from the previous quarter. In the last *Quarterly Report*, this figure was erroneously reported as \$59.4 million in this table and in the Customer Credit Subaccount narrative section, although the correct figure was shown in Table II.

⁵ Includes \$15 million transferred from the Existing Account to the Emerging Account in the second quarter of year 2001, pursuant to AB 29X.

⁶ Includes \$13,819 in voluntary contributions, but does not include \$224,000 collected from ratepayers of the participating utility, Bear Valley Electric Company.

⁷ To date, the Energy Commission has reallocated \$40 million from the Existing Account to the New Account for the second auction.

⁸ See Footnote 5.

⁹ The Energy Commission reallocated \$13 million from the Existing Account to the Emerging Account in September 2002.

¹⁰ The Energy Commission reduced a previous \$40 million reallocation from the Existing Account to the New Account to \$33.8 million, and redirected the \$6.2 million to the Emerging Account.

¹¹ See Footnote 7.

¹² See Footnotes 8, 9, 10, and 13.

¹³ The Energy Commission reallocated \$10 million in unused funds from the Customer Credit Subaccount to the Emerging Account in September 2001.

¹⁴ Encumbered for potential reallocation to the New Account as winning projects from the third auction come on-line and become eligible for funding.

¹⁵ The Energy Commission conditionally awarded \$162 million at its June 1998 auction, \$40 million at its December 2000 auction, and up to \$40 million at its August 2001 auction. As funds become available, they are encumbered for projects.

¹⁶ Encumbered for rebate reservation requests approved but not yet paid.

¹⁷ Encumbered for grant projects and contract activities.

¹⁸ This figure does not account for the funds (up to \$40 million) that the Energy Commission has authorized for reallocation to the New Account for the purpose of funding the third auction. At least \$3.7 million proposed for that reallocation will not be needed, however, and that amount will remain in the Existing Account.

¹⁹ Revenue and Taxation Code, Sections 17053.84 and 23684